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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/342,843

Applicant(s)

KNUUTILA ET AL.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-19,21,22,24-39,41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-19,21-22,24-39,41-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

**Office Action for
Amendment Received on 11/13/2003**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 4-5, 7-13, 15-18, 31-32, 37-38, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al. (US 5,519,886) in view of Reichman et al. (US 6,240,073 BI).

Regarding **claim 1**, Gilbert et al. (Gilbert) teaches a method and apparatus for controlling a transmitter of a portable radio communication apparatus (title, abstract, Fig. 2, transmitter 242, temperature sensor 2.46) for communication in a radio communication network (TDMA network, col. 1, line 36) employing transmission by a plurality of carrier frequencies (establishing wireless radio frequency carrier, col. 2, line 15; manipulation of the operation of the data communication protocol 120 using temperature information, col. 2, lines 24-30; col. 3, line 42-54).

Gilbert teaches the frames (data packets) each consisting of a predetermined number of time slots (col. 3, line 37) and the transmitter transmitting data burst during one or more of said time slots in the frame (col. 3, lines 16-41, packet data protocol; different channels; preferred time slots; protocol parameters).

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Gilbert teaches monitored criterion is the number of burst, the controlling of the data transmission of a transmitter by monitoring of the transmitter temperature criterion (Fig. 2, temperature sensor 246, control 210, Tx 242, power amplifier 240), for dynamically changing the transmission protocol (Fig. 3, 340,350/360), the monitoring of the number of burst for changing the transmission protocol by segmenting of the message into smaller packets, or longer delayed period, to reduce periods of continuous transmission (col. 4, lines 40-48, col. 1, lines 38-50).

Gilbert teaches the controlling of the transmitter output level, by modifying the transmission parameters in step 360 (col. 4, lines 27-34), by decreasing transmitter output level, such that the temperature of the power amplifier can be lower than maximum allowable temperature.

In the above it does not clearly teach the monitored criterion comprising the number of transmitted data bursts in frame, and the amended portion for the wherein one of the at least monitored criterion comprises the number of transmitted data burst in a frame, Reichman teaches the switching means between the first communication means and the second transmission means when the message length is either exceeding or failed to exceeding a predetermined threshold (col. 5, lines 15-59; col. 6, lines 19-43). Reichman teaches the exceeding of the predetermined threshold (col. 5, lines 40-41, col. 5, lines 51-53). Reichman teaches the user terminal's transmitter means which including the first communication means for transmitting short bursting data, and second communication means for transmitting continuous data (as shown in col. 24, lines 38-65), such that the transmission of data could be efficient depending upon the length of the message, as shown above. Therefore, it would

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have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Reichman's first, second transmission communication means for short bursting, separate continuous data, such that the system can be improved by transmitting data based upon the monitored message length.

Regarding **claim 2**, Gilbert taught in claim 1 above, the temperature sensor 246 of the transmitter.

Regarding **claim 4**, Funk taught above in claim 1 the monitoring of the transmitter temperature and reducing the transmitter output power level.

Regarding **claim 5**, it has been shown above in claim 1, Funk has taught the back-off the transmitter output power level from high power level to the lower power level (col. 3, lines 48-67).

Regarding **claim 7**, Gilbert taught the monitoring of the smaller packet segmenting for decreasing the transmitter's temperature.

Regarding **claim 8**, Gilbert has shown in claim 1 above, the comparing, exceeding the packet size in the protocol, and the modifying, segmenting, the packet data into smaller packet size.

Regarding **claim 9**, Gilbert has shown above the communication device 200 performs the monitoring step.

Regarding **claim 10**, Reichman taught above the network performing of the monitoring, by monitoring of the return link from user for changing the amount of data transmission (abstract, the hub receiving transmission from user in col. 24, lines 38-46).

Regarding **claim 11**, Gilbert teaches a method and apparatus for controlling a transmitter of a

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portable radio communication apparatus (title, abstract, Fig. 2, transmitter 242, temperature sensor 2.46) for communication in a radio communication network (TDMA network, col. 1, line 36) employing transmission by a plurality of carrier frequencies (establishing wireless radio frequency carrier, col. 2, line 15; manipulation of the operation of the data communication protocol 120 using temperature information, col. 2, lines 24-30; col. 3, line 42-54).

Gilbert teaches the frames (data packets) each consisting of a predetermined number of time slots (col. 3, line 37) and the transmitter transmitting data burst during one or more of said time slots in the frame (col. 3, lines 16-41, packet data protocol; different channels; preferred time slots; protocol parameters).

Gilbert teaches monitored criterion is the number of burst, the controlling of the data transmission of a transmitter by monitoring of the transmitter temperature criterion (Fig. 2, temperature sensor 246, control 210, Tx 242, power amplifier 240), for dynamically changing the transmission protocol (Fig. 3, 340,350/360), the monitoring of the number of burst for changing the transmission protocol by segmenting of the message into smaller packets, or longer delayed period, to reduce periods of continuous transmission (col. 4, lines 40-48, col. 1, lines 38-50).

Gilbert does not clearly indicate the details clearly enough for the controlling of the transmitter output level, although Gilbert discloses the controlling the operation transmission protocol, the transmission rate, the transmission delay, the reducing period to avoid the continuous transmission, the segmenting data messages into smaller packets. Funk teaches the method and apparatus for system (col. 6, line 20) for monitoring at least one criterion

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associated with heat generated by the transmitter (monitoring the temperature, and output power of the power amplifier 11' 1, abstract, front figure; CDPD packet data, col. 2, line 32). Funk teaches the providing a signal responsive to the at least one monitored criterion (temperature, transmission power level) for reducing the transmitter output power (abstract). Besides, Funk also teaches the inserting of the brief transmission pause cycle in the data transmission stream to reduce the transmitter's overheating (abstract, col. 5, lines 33-35). Funk also teaches the reducing the transmission duty cycle (col. 5, lines 13), and the control signal to back-off transmitter's output power to lower level (col. 3, lines 48-67). Funk teaches the reducing transmission power level to avoid the transmitter's overheating, such that the transmitter could be protected from damage by controlling of the transmitter's output power or inserting the pause period to reduce the transmission period. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert, and add Funk's temperature/power level monitoring, the reducing transmitter's output power level, and the inserting back-off brief pauses period, such that the transmitter could be protected from damage.

In the above it does not clearly teach the monitored criterion comprising the number of transmitted data bursts in frame, and the amended portion for the wherein one of the at least monitored criterion comprises the number of transmitted data burst in a frame, Reichman teaches the switching means between the first communication means and the second transmission means when the message length is either exceeding or failed to exceeding a predetermined threshold (col. 5, lines 15-59; col. 6, lines 19-43). Reichman teaches the user

terminal's transmitter means which including the first communication means for transmitting short bursting data, and second communication means for transmitting continuous data (as shown in col. 24, lines 38-65), such that the transmission of data could be efficient depending upon the length of the message, as shown above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Reichman's first, second transmission communication means for short bursting, separate continuous data, such that the system can be improved by transmitting data based upon the monitored message length.

Regarding **claim 12**, Gilbert discloses the monitoring is performed over time periods for previous transmission (col. 3, lines 9-11), the pre-determined number packet size from the data communication protocol.

Regarding **claim 13**, Funk taught in claim 1 the controlling of the transmitter's output power.

Regarding **claim 15**, Gilbert discloses the monitoring of the transmitter's temperature and response to the monitored temperature data to control the number of the data packet size.

Regarding **claim 16**, Gilbert taught above the decreasing the number of burst packet to smaller segment packet size and change the communication protocol, and Reichman taught amount of transmission data exceeding of the predetermined threshold level (col. 5, lines 15-59; col. 6, lines 19-43).

Regarding **claims 17, 18**, referring to the examiner's comment in claim 9, the monitoring is performed by the communication device 200; and the monitoring is performed by the network's base station 32, and Reichman taught the network for monitoring of the received data from user terminal (col. 24, lines 39-46).

Regarding **claim 31**, Gilbert teaches a method and apparatus for controlling a transmitter of a portable radio communication apparatus (title, abstract, Fig. 2, transmitter 242, temperature sensor 2.46) for communication in a radio communication network (TDMA network, col. 1, line 36) employing transmission by a plurality of carrier frequencies (establishing wireless radio frequency carrier, col. 2, line 15; manipulation of the operation of the data communication protocol 120 using temperature information, col. 2, lines 24-30; col. 3, line 42-54). Gilbert teaches the frames (data packets) each consisting of a predetermined number of time slots (col. 3, line 37) and the transmitter transmitting data burst during one or more of said time slots in the frame (col. 3, lines 16-41, packet data protocol; different channels; preferred time slots; protocol parameters). Gilbert teaches monitored criterion is the number of burst, the controlling of the data transmission of a transmitter by monitoring of the transmitter temperature criterion (Fig. 2, temperature sensor 246, control 210, Tx 242, power amplifier 240), for dynamically changing the transmission protocol (Fig. 3, 340,350/360), the monitoring of the number of burst for changing the transmission protocol by segmenting of the message into smaller packets, or longer delayed period, to reduce periods of continuous transmission (col. 4, lines 40-48, col. 1, lines 38-50).

Gilbert does not clearly indicate the details clearly enough for the controlling of the transmitter output level, although Gilbert discloses the controlling the operation transmission protocol, the transmission rate, the transmission delay, the reducing period to avoid the continuous transmission, the segmenting data messages into smaller packets. Funk teaches the method and apparatus for system (col. 6, line 20) for monitoring at least one criterion associated with heat generated by the transmitter (monitoring the temperature, and output

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power of the power amplifier 11' _ 1, abstract, front figure; CDPD packet data, col. 2, line 32). Funk teaches the providing a signal responsive to the at least one monitored criterion (temperature, transmission power level) for reducing the transmitter output power (abstract). Besides, Funk also teaches the inserting of the brief transmission pause cycle in the data transmission stream to reduce the transmitter's overheating (abstract, col. 5, lines 33-35). Funk also teaches the reducing the transmission duty cycle (col. 5, lines 13), and the control signal to back-off transmitter's output power to lower level (col. 3, lines 48-67). Funk teaches the reducing transmission power level to avoid the transmitter's overheating, such that the transmitter could be protected from damage by controlling of the transmitter's output power or inserting the pause period to reduce the transmission period. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert, and add Funk's temperature/power level monitoring, the reducing transmitter's output power level, and the inserting back-off brief pauses period, such that the transmitter could be protected from damage.

In the above it does not clearly teach the monitored criterion comprising the number of transmitted data bursts in frame, and the amended portion for the wherein one of the at least monitored criterion comprises the number of transmitted data burst in a frame, Reichman teaches the switching means between the first communication means and the second transmission means when the message length is either exceeding or failed to exceeding a predetermined threshold (col. 5, lines 15-59; col. 6, lines 19-43). Reichman teaches the exceeding of the predetermined threshold (col. 5, lines 40-41, col. 5, lines 51-53). Reichman teaches the user terminal's transmitter means which including the first communication means

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for transmitting short bursting data, and second communication means for transmitting continuous data (as shown in col. 24, lines 38-65), such that the transmission of data could be efficient depending upon the length of the message, as shown above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Reichman's first, second transmission communication means for short bursting, separate continuous data, such that the system can be improved by transmitting data based upon the monitored message length.

Regarding **claim 32**, Gilbert taught in claims 12 above for the system and the predetermined period of time or predetermined number segment in TDMA frames.

Regarding **claims 37, 38**, Gilbert taught in claim 1 above for the system and the apparatus/network for monitoring, the processor/controller 210. Gilbert has shown above the communication device 200 performs the monitoring step. Reichman taught above the network performing of the monitoring, by monitoring, comparing, of the return link from user for changing the amount of data transmission (abstract, the hub receiving transmission from user in col. 24, lines 38-46).

Regarding **claim 41**, Gilbert taught above the apparatus and the network, the predetermined number of time slots in the TDMA communication protocol, the monitoring heat, temperature, the responsive to the monitored criterion temperature high for changing the transmission data amount to segmented data size, to a longer delayed short message data transmission.

Gilbert does not clearly indicate the details clearly enough for the controlling of the

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transmitter output level, Funk teaches the method and apparatus for system (col. 6, line 20) for monitoring at least one criterion associated with heat generated by the transmitter (monitoring the temperature, and output power of the power amplifier 11'_1, abstract, front figure; CDPD packet data, col. 2, line 32). Funk teaches the providing a signal responsive to the at least one monitored criterion (temperature, transmission power level) for reducing the transmitter output power (abstract). Besides, Funk also teaches the inserting of the brief transmission pause cycle in the data transmission stream to reduce the transmitter's overheating (abstract, col. 5, lines 33-35). Funk also teaches the reducing the transmission duty cycle (col. 5, lines 13), and the control signal to back-off transmitter's output power to lower level (col. 3, lines 48-67). Funk teaches the reducing transmission power level to avoid the transmitter's overheating, such that the transmitter could be protected from damage by controlling of the transmitter's output power or inserting the pause period to reduce the transmission period. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert, and add Funk's temperature/power level monitoring, the reducing transmitter's output power level, and the inserting back-off brief pauses period, such that the transmitter could be protected from damage.

In the above it does not clearly teach the monitored criterion comprising the number of transmitted data bursts in frame, and the amended portion for the wherein one of the at least monitored criterion comprises the number of transmitted data burst in a frame, Reichman teaches the switching means between the first communication means and the second transmission means when the message length is either exceeding or failed to exceeding a predetermined threshold (col. 5, lines 15-59; col. 6, lines 19-43). Reichman teaches the

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exceeding of the predetermined threshold (col. 5, lines 40-41, col. 5, lines 51-53). Reichman teaches the user terminal's transmitter means which including the first communication means for transmitting short bursting data, and second communication means for transmitting continuous data (as shown in col. 24, lines 38-65), such that the transmission of data could be efficient depending upon the length of the message, as shown above. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Reichman's first, second transmission communication means for short bursting, separate continuous data, such that the system can be improved by transmitting data based upon the monitored message length.

2. Claims 6, 14, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Reichman, as applied to claim 1 above, and further in view of GSM 04.08 version 4.19.1 (ETS 300,557).

In the above, it does not clearly teach the changing the maximum power classmark.

Regarding **claim 6**, GSM 04.08 (page 51, section 3.4.9.2, the abnormal cases; sections 3.4.10-3.4.12) teaches the procedure for the changing of the power classmark from mobile request. GSM 04.08 teaches the flexibility of changing the power classmark for the transmitter in the abnormal situation such that the transmitter could reduce the heat to be building up by reducing the power class mark. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and add GSM 04.08's mobile request for changing the power classmark and the changing procedure, such

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that the mobile station could change the power classmark due to abnormal, temperature, situation.

Regarding **claim 14**, referring to claim 6 above for the changing power classmark.

Regarding **claims 33, 34, 35**, Gilbert taught above the system and the processor (controller 210, Gilbert) controlling of the transmitter 242, the controlling of the burst by changing segmenting into smaller packet size. GSM 04.08 taught the changing of the power classmark via mobile request of the GSM procedure.

Regarding **claim 36**, Gilbert taught in claim 1 above for the system and the monitoring number of burst to decreasing the bursts by segmenting the packet size into smaller size.

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of in view of Kiem et al. (US5,815,820), and further in view of Mitzlaff (US 4,636,741).

Regarding **claim 19**, Gilbert taught a method for controlling a transmitter; plurality of frequencies, time slots, monitoring power level; the comparing the monitored power.

Regarding the changing the maximum allowed transmission power level; the monitored transmission power level is compared with pre-determined level, if the monitored power level is above the predetermined level, then, maximum allowed power level is decreased by changing the power classmark; Kiem teaches the above features for the portable radiotelephone to adjust its transmit power for the antenna position in the extended or retracted position, when transmitter power from the antenna is exceeding the maximum authorized power, for changing the power classmark ,according to EIA standard table 2.1.21,

in between classes 1-3 (abstract, figure in cover page., col. 17, line 64 to col. 18, line 24; col. 18, line 51 to col. 19, line 35). Kiem teaches the transmitter power is over the maximum allowed level, and changing the reducing the power class from high class to lower class to Gilbert, such that the maximum allowable power could be flexibly for a reasonable change of the power classmark of the transmitter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Kiem's transmitter power is over the maximum allowed level, and changing the reducing the power class from high class to lower class, such that the system could be flexible for changing the power classmark for adjust the transmitter output power to improve the transmitter's heating up problem.

Regarding the amended portion for monitoring the transmission power level, if above predetermined level then the maximum output power level is decreased by changing the power class mark, Mitzlaff-'741 teaches a multilevel power amplifying circuit for portable transceiver (title, abstract, figure in cover page). Upon detecting of the presence of vehicular adaptor, the maximum transmission output level of the transmitter is changed (as shown in abstract, Fig. 13, summary of invention). Mitzlaff teaches the operational class of the transceiver is changed from class 1 to class 3 (as shown in col. 9, line 1-17). Mitzlaff teaches the transmission power level monitoring for maximum power level in order to change the power class between operating class 1 and class 3 (col. 8, line 51 to col. 9, line 45). The GSM 04.08 (page 51, section 3.4.9.2, the abnormal cases; sections 3.4.10-3.4.12) taught the procedure for the changing of the power classmark from mobile request. Mitzlaff teaches a technique for switching the transmitter maximum output power between class 1 and class 3,

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such that the transmitter can efficiently control the transmitting power, by change the power class level. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert above, and include Mitzlaffs changing of the transmission maximum output power between class 1 and class 3, such that transmitter can efficiently control the transmitting power, by change the power class level.

4. Claims 21-22, 24, 26-30, 39, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Reichman, and further in view of GSM 04.08 (ETS 300,557).

Regarding **claim 21**, Gilbert taught above in claim 1 for the system and the apparatus in a radio network having frequencies, TDMA time slots, burst, for monitoring at least one criteria associated with the heat, and at least one output criterion of the transmitter (output power, packet size, delay, transmit period) being responsive to the monitored criterion. Gilbert teaches monitored criterion is the number of burst, the controlling of the data transmission of a transmitter by monitoring of the transmitter temperature criterion (Fig. 2, temperature sensor 246, control 210, Tx 242, power amplifier 240), for dynamically changing the transmission protocol (Fig. 3, 340,350/360), the monitoring of the number of burst for changing the transmission protocol by segmenting of the message into smaller packets, or longer delayed period, to reduce periods of continuous transmission (col. 4, lines 40-48, col. 1, lines 38-50). Reichman taught above the plurality of carriers I the FDMA system (abstract).

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Regarding **claim 22**, Gilbert taught above the monitoring of the temperature of the transmitter.

Regarding **claim 24**, Reichman taught the monitoring of the transmitter output (col. 6, lines 19-43).

Regarding **claim 26**, GSM 04.08 taught in claim 6 above for the system and the decreasing, changing of the power classmark.

Regarding **claim 27**, Gilbert taught in claim 1 above for the system and output criterion comprising the number of burst in a frame (modify the burst packet size for a smaller size).

Regarding **claim 28**, Reichman taught above the monitored transmission data exceeding a predetermined limit level the exceeding of the predetermined packet size limit (col. 5, lines 15-59; col. 6, lines 19-43). Gilbert taught above the segmenting of the packet size into smaller size.

Regarding **claim 29**, Gilbert has shown above the communication device 200 performs the monitoring step, including the monitoring means.

Regarding **claim 30**, Reichman taught in claim 10 above for the system and the network (base station 32) including the monitoring means. Reichman taught above the network performing of the monitoring, by monitoring of the return link from user for changing the amount of data transmission (abstract, the hub receiving transmission from user in col. 24, lines 38-46).

Regarding **claim 39**, Gilbert taught in claim 1 above for the system and the monitoring number of burst, temperature, such that the to decreasing the bursts by segmenting the packet size into smaller size. Reichman taught above the monitored transmission data

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exceeding a predetermined limit level the exceeding of the predetermined packet size limit. GSM 04.08 taught above the changing of the maximum power level and the decreasing, changing of the power classmark, for the same reasons above to combine Gilbert, Reichman and GSM 04.08.

Regarding **claim 42**, Gilbert taught the network, the bursts in the time slots, Reichman taught the FDMA carriers, the apparatus registering, changing, GSM 04.08 taught the power classmark with the GSM procedure for the mobile request for changing the power classmark of the communication 200, for the same reasons above to combine Gilbert, Reichman, and GSM 04.08.

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Reichman, GSM 04.08, and further in view of Funk.

Regarding **claim 25**, GSM 04.08 taught above the exceeding the power classmark, the procedure to change the transmit power output level class mark.

Funk has taught the back-off the transmitter output power level from high power level to the lower power level (col. 3, lines 48-67), the system and the exceeding a predetermined limit then decreasing the transmitter power level. Funk teaches the inserting of the brief transmission pause cycle in the data transmission stream to reduce the transmitter's overheating (abstract, col. 5, lines 33-35). Funk also teaches the reducing the transmission duty cycle (col. 5, lines 13), and the control signal to back-off transmitter's output power to lower level (col. 3, lines 48-67). Funk teaches the reducing transmission power level to avoid

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the transmitter's overheating, such that the transmitter could be protected from damage by controlling of the transmitter's output power or inserting the pause period to reduce the transmission period. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Gilbert, and add Funk's temperature/power level monitoring, the reducing transmitter's output power level, and the inserting back-off brief pauses period, such that the transmitter could be protected from damage.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 4-19, 21-22, 24-39, 41-42 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument and amendment based on the no teachings for the monitoring of criterion for a number of transmitted bursts in frame for controlling the transmitter, the reducing the maximum allowed power level by changing transmitter power class mark when transmission power is exceeding predetermined level, the ground of rejection has been changed.

Gilbert teaches monitored criterion is the number of burst, the controlling of the data transmission of a transmitter by monitoring of the transmitter temperature criterion (Fig. 2, temperature sensor 246, control 210, Tx 242, power amplifier 240), for dynamically changing the transmission protocol (Fig. 3, 340,350/360), the monitoring of the number of burst for changing the transmission protocol by segmenting of the message into smaller packets, or longer delayed period, to reduce periods of continuous transmission (col. 4, lines 40-48, col. 1, lines 38-50). Gilbert teaches the monitoring of the temperature of the power amplifier and the transmitter output, for determining the proper operation to control, regulate

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the transmitter operation to reduce the temperature of the monitored power amplifier, by delaying the data transmission, by modifying the method of transmission and reducing the size of the transmitted data segment into smaller packets, so as to reduce the periods of continuous transmitting to decrease the temperature.

Reichman taught the transmitter and the monitoring and changing of the amount of transmission data for transmitter (abstract, col. 5, lines 35-59, col. 6, lines 19-43, col. 24, lines 38-65).

Mitzlaff taught above the transmission power level monitoring for maximum power level in order to change the power class between operating class 1 and class 3 (col. 8, line 51 to col. 9, line 45). The GSM 04.08 (page 51, section 3.4.9.2, the abnormal cases; sections 3.4.10-3.4.12) taught the procedure for the changing of the power classmark from mobile request.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306 (for Technology Center 2600 only)

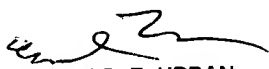
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2685

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow C,C.

January 16, 2004.


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600